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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,206	08/22/2003	Steffen Hornig	P2001,0122	9023
24131	7590	07/29/2005	EXAMINER	
LERNER AND GREENBERG, PA			DOLAN, JENNIFER M	
P O BOX 2480			ART UNIT	
HOLLYWOOD, FL 33022-2480			PAPER NUMBER	

2813

DATE MAILED: 07/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Advisory Action Before the Filing of an Appeal Brief</b>	Application No. 10/646,206	Applicant(s) HORNIG ET AL.	
	Examiner Jennifer M. Dolan	Art Unit 2813	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 12 July 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:
- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
- Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
- (a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ They raise the issue of new matter (see NOTE below);
- (c) ☒ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet. (See 37 CFR 1.116 and 41.33(a)).

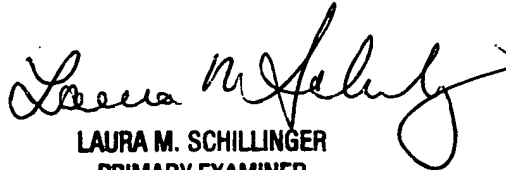
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☒ Applicant's reply has overcome the following rejection(s): none.
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
- The status of the claim(s) is (or will be) as follows:
- Claim(s) allowed: none.
- Claim(s) objected to: none.
- Claim(s) rejected: 1-21.
- Claim(s) withdrawn from consideration: none.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). \_\_\_\_\_
13. ☐ Other: \_\_\_\_\_

  
**LAURA M. SCHILLINGER**  
**PRIMARY EXAMINER**

Continuation of 3. NOTE: The deletion of titanium oxide in claim 13 raises new issues that would require further consideration.

Continuation of 11. does NOT place the application in condition for allowance for the following reasons

Regarding the application of the Kusumoto reference:

The Applicant argues that in the present invention, as disclosed in the original specification and the amended claim 13, titanium oxide is only used as a matrix substance and not as a viable nanoparticle. This assertion, however, is directly contradicted by line 17 of page 8 of the original specification, which states that oxides of materials such as Ti can be used for the nanoparticle. Since Kusumoto teaches the same matrix composition, particle composition, and particle size as that disclosed by the applicant, it seems apparent that it must likewise absorb light via the same mechanism as the structure claimed by the applicant.

Regarding the Okamura and Nomura references:

The Applicant states that "it is questionable why the Examiner assumes that the carbon particles are subject to the second mechanism of light absorption (the quantum size effect) in the absence of any explicit or implicit disclosure in Okamura thereof." The Examiner, however, respectfully points out that these arguments had already been addressed in the Office Action mailed 4/12/05, in which several references (EP 0 770 579 to Yamada, US 2002/0186921 to Schumacher et al. and US 2005/0061363 to Ginley et al.) were cited as providing evidence that carbon and silica fine particles with specified particle sizes will exhibit quantum size effects.

Regarding the argument that the references do not explicitly mention the quantum size effect:

The Applicant is politely reminded (as in the Office Action mailed 4/12/05) that the prior art references do not need to explicitly point out the presence of inherent features, and a person of ordinary skill in the art would not need to have recognized the inherent disclosure at the time of invention, but rather it is only required that the subject matter is in fact inherent in the prior art reference. *Schering Corp. v. Geneva Pharm. Inc.*, 339 F.3d. 1373, 1377, 67 USPQ2d 1664, 1668 (Fed. Cir. 2003).